Abstract of the Disclosure

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A mixture lubricated two-stroke engine includes a cylinder (4) having a cylinder head (3) and a cylinder bore (5) open to the crankcase (6). A piston (7) is displaceably arranged in the cylinder bore (5). The piston (7) and the cylinder (4) conjointly delimit a combustion chamber (8). A mixture is led into the crankcase (6) via a mixture inlet (12). crankcase (6) is flow connected to the combustion chamber (8) via transfer channels (14, 15). The transfer channels (14, 15) are open at their ends (16) toward the crankcase (6) and are connected to bypass channels (18, 19) between the ends (16) of the transfer channels facing toward the crankcase and their ends (17) facing toward the combustion chamber. The bypass channels (18, 19) supply air and open via a membrane valve (20) into the transfer channels. The membrane (21) of the membrane valve (20) is held on a wall part of the transfer channel (14, 15). For a simple configuration, the membrane (21) is positioned in the transfer channel (14, 15) axially through the end (16) of the transfer channel (14, 15) facing toward the crankcase and is fixedly mounted on the cylinder 4 in the region of the end (16) facing toward the crankcase.